IN THE UNITED STATES PATENT AND TRADEMARK OFFICE procants: Shepard et al. I hereby certify that this paper is being deposited with the United States Postal Serial No.: 10/074.304 Service, first class postage prepaid, addressed to: Commissioner for Patents Title: Highly Versatile Process Control P.O. Box 1450, Alexandria, Virginia System Controller 22313-1450, on the date indicated: March 8, 2004. Filed: February 12, 2002 Group Art Unit: 2182 RECEIVED Examiner: Shin, Christopher B. M. Peters Atty. Docket Number: 06005/38039 Registration No. 48,801 Technology Center 2100 Attorney for Applicants Customer No.: 04743

RESPONSE TO OFFICE ACTION DATED FEBRUARY 6, 2004

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Dear Sir:

In response to the restriction requirement raised in the Office action dated February 6, 2004, Applicants hereby elect, *without traverse*, the claims associated with Group I as identified in the Office action, namely claims 1-39, for further prosecution in this application. Applicants respectfully point out that claims 40 and 41 are dependent upon independent claim 39. It appears that the Examiner intended these claims to be associated with Group I and Applicants submit that they should be considered as well.

In response to the election of species requirement within the Office action, the applicants hereby provisionally elect, *with traverse*, the species corresponding to identified species group (ii) for further prosecution in this application. Claims 5, 8 and 31 read on the elected species.

The applicants respectfully submit that the Examiner has not made *prima facie* showing that each of the species groups identified in the Office action relate to a patentably distinct species. According to MPEP 803, "Examiners must provide reasons and/or examples to support conclusions, ... For purposes of the initial requirement, a serious burden on the

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examiner may be *prima facie* shown if the examiner shows by appropriate explanation of separate classification, or separate status in the art, or a different field of search as defined in MPEP 808.02. ... Insofar as the criteria for restriction or election practice relating to claims to genus-species, see MPEP 806.04(a) - 806.04(i) and 808.01(a)." Contrary to the requirements above, the Examiner has not provided reasoning or examples for the conclusion that each of the identified species groups is a patentably distinct species. Further, the Examiner has not satisfied the necessary criteria for an election of species, as required by MPEP 803, because the identified species groups have been improperly identified according to the claims and because the identified species groups are not mutually exclusive.

Contrary to the requirements of MPEP 803, the Examiner has not provided reasons or examples for concluding that Group I contains patentably distinct species. In particular, the Examiner has not demonstrated or explained how each of the species groups (i)-(xxii) requires a separate classification, separate status in the art, or a different field of search, as required by MPEP 803. Instead, the Examiner merely asserts that Group I contains too many different patentably distinct species without definitively demonstrating that these patentably distinct species exist. A mere assertion that too many species exist does not, in and of itself, prove that such species exist.

Furthermore, the Examiner has merely defined the identified species according to claim limitations, and not in accordance with any other identifiable criteria. However, according to MPEP 806.04(e), "[c]laims are definitions of inventions. *Claims are never species*." (Emphasis in original). Thus, species groups are not defined according to the claims. Nonetheless, the Examiner has identified almost every dependent claim within Group I as a separate species without providing any other criteria mandating the species election. The only exceptions are claims reciting the same element under a different claim set (e.g., claims 4, 30 & 41 recite a MODBUS TCP; claims 5, 8 & 31 recite a register bus, etc.) Because the Examiner has merely defined the species according to the claims, the Examiner has not met the criteria of MPEP 806.04(e) and MPEP 803.

Further contrary to the criteria for species election, the Examiner has not defined the identified species groups according to mutually exclusive characteristics. In fact, MPEP 806.04(f) requires that "[c]laims to be restricted to different species must be mutually exclusive. ... claims to be restricted to different species must recite the mutually exclusive

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characteristics of such species." In this case, however, the Examiner has not demonstrated, or even stated, that the claims within each of the identified species groups are mutually exclusive.

In fact, the claims within many of the different identified species groups are, by definition, not mutually exclusive. For instance, the claims of many of the identified species groups depend from, and thus include all the characteristics of claims in other ones of the identified species groups. As an example, claim 5 of identified species group (ii) is dependent from claim 4 of identified species group (i). MPEP 806.04(f) thus precludes claim 5 from being restricted to a species group different than claim 4, because claim 5 includes all of the characteristics of claim 4 by virtue of its dependency, and therefore by definition cannot be mutually exclusive of claim 4. Likewise, claim 13 of identified species group (viii) depends from claim 12 of identified species group (vii), and includes all of the characteristics of claim 12. Therefore, identified species groups (vii) and (viii) are not defined by mutually exclusive characteristics.

Moreover, the figures of the application further demonstrate that many of the identified species groups are not defined by mutually exclusive characteristics. For example, Figure 1 shows that a communication port 18 may be a MODBUS TCP port (species group (i)), and may reside in the same embodiment with a serial communication port 20 (species group (iii)). As a result, the two are not mutually exclusive. However, the Examiner has improperly identified each of these as relating to a separate species (i.e., species groups (i) and (iii)). Figure 1 further shows that a memory 14 may include a number of routines including a fuzzy logic control routine, a neural network control routine, a model predictive control routine, an adaptive tuning routine, an optimization routine, an alarming routine and a diagnostic routine. These routines may reside within the memory 14 in the same embodiment. (See application, p.7, 11., 23 to p.8, 11. 14). Nonetheless, the Examiner has improperly identified each of these routines as relating to a separate species (i.e., species groups (xi)-(xvii)). The figures further demonstrate that many additional characteristics may coexist in the same embodiment, and that many corresponding species groups have also been improperly defined. Because the Examiner has not alleged, much less demonstrated, mutually exclusive characteristics for each of the identified species groups, and because the claims and figures demonstrate that many of the identified species groups actually lack

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mutually exclusive characteristics, the Examiner has not properly restricted the claims based on species criteria, as required by MPEP 806.04(f) and MPEP 803.

For these reasons, Applicants respectfully submit that the requirements for election of species are not met, and that the election should be withdrawn. As a result, Applicants respectfully request that each of claims 1-41 presently pending in this application be examined. Should the Examiner have any questions, the Examiner is respectfully invited to telephone the undersigned.

Respectfully submitted,

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